

[0083] 20. The driveline of example 13, further including one or more bearings supporting the first axle shaft and the planetary gear set for rotation about a rotation axis, wherein the one or more bearings have a ball or roller that is crowned in the direction of the rotation axis.

[0084] The terminology used herein is for the purpose of describing particular embodiments only and is not intended to be limiting of the disclosure. As used herein, the singular forms “a”, “an” and “the” are intended to include the plural forms as well, unless the context clearly indicates otherwise. It will be further understood that the terms “comprise” and/or “comprising,” when used in this specification, specify the presence of stated features, integers, steps, operations, elements, and/or components, but do not preclude the presence or addition of one or more other features, integers, steps, operations, elements, components, and/or groups thereof.

[0085] The description of the present disclosure has been presented for purposes of illustration and description, but is not intended to be exhaustive or limited to the disclosure in the form disclosed. Many modifications and variations will be apparent to those of ordinary skill in the art without departing from the scope and spirit of the disclosure. Explicitly referenced embodiments herein were chosen and described to best explain the principles of the disclosure and their practical application, and to enable others of ordinary skill in the art to understand the disclosure and recognize many alternatives, modifications, and variations on the described example(s). Accordingly, various embodiments and implementations other than those explicitly described are within the scope of the following claims.

What is claimed is:

1. An axle final drive assembly for a work vehicle comprising:

- a final drive housing;
- an output shaft extending from the final drive housing;
- a planetary gear set contained in the final drive housing and having an element fixed to the output shaft; and
- an input member contained in the final drive housing providing rotational input to the planetary gear set for driving the output shaft;

wherein the planetary gear set, at least in part, is pivotally coupled to the input member.

2. The assembly of claim 1, wherein the planetary gear set has a sun gear pivotally coupled to the input member.

3. The assembly of claim 2, wherein the sun gear and the input member engage at a mating spline connection in which splines of the sun gear or the input member have a crowned profile in an axial dimension of the output shaft.

4. The assembly of claim 3, wherein the crowned profile is partially spherical.

5. The assembly of claim 2, wherein the sun gear has spherically crowned splines that mate with splines of the input member.

6. The assembly of claim 1, wherein the planetary gear set has a carrier and the carrier is the element to which the output shaft is fixed.

7. The assembly of claim 6, wherein the carrier is formed by a carrier housing with inboard and outboard plates, the output shaft being bolted to the outboard plate.

8. The assembly of claim 1, wherein the planetary gear set has a ring gear fixed to the final drive housing.

9. The assembly of claim 8, wherein the planetary gear set has planet gears with teeth that mate with teeth of the ring gear at a gear mesh having a crowned profile in an axial dimension of the output shaft.

10. The assembly of claim 9, wherein the teeth of the planet gears have a spherical crown in the axial dimension of the output shaft.

11. The assembly of claim 1, further including one or more bearings supporting the output shaft and the planetary gear set for rotation about a rotation axis;

wherein the one or more bearings have a ball or roller that is crowned in the direction of the rotation axis.

12. The assembly of claim 11, wherein the one or more bearings are spherical roller bearings.

13. A driveline for a work vehicle, comprising:

- a first drive system comprising a drive wheel;

- a first axle shaft with a first end and a second end, the first end of the first axle shaft engaging the drive wheel of the first drive system;

- a first final drive assembly comprising:

- a final drive housing receiving the second end the first axle shaft; and

- a planetary gear set contained in the final drive housing and having an element fixed to the first axle shaft; and

- an axle arrangement center section configured to receive rotational input from a drive shaft and comprising an input member to distribute at least a portion of the rotational input to the planetary gear set for driving the first axle shaft,

wherein the planetary gear set, at least in part, is pivotally coupled to the input member of the axle arrangement center section.

14. The driveline of claim 13, wherein the first drive system is repositionable along the first axle shaft in an axial dimension.

15. The driveline of claim 13, wherein the planetary gear set has a sun gear pivotally coupled to the input member at a mating spline connection in which splines of the sun gear or the input member have a crowned profile in an axial dimension of the first axle shaft.

16. The driveline of claim 15, wherein the crowned profile is partially spherical.

17. The driveline of claim 13, wherein the planetary gear set has a carrier formed by a carrier housing with inboard and outboard plates, the first axle shaft being bolted to the outboard plate.

18. The driveline of claim 17, wherein the planetary gear set has a ring gear fixed to the final drive housing.

19. The driveline of claim 18, wherein the planetary gear set has planet gears with teeth that mate with teeth of the ring gear at a gear mesh having a crowned profile in an axial dimension of the first axle shaft.

20. The driveline of claim 13, further including one or more bearings supporting the first axle shaft and the planetary gear set for rotation about a rotation axis, wherein the one or more bearings have a ball or roller that is crowned in the direction of the rotation axis.

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